Draft
Environmental Assessment

Thompson Chain of Lakes
Forest Management Project 2019

August 30, 2019

THE **OUTSIDE** IS IN US ALL.

Draft Environmental Assessment
CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of proposed state action: Montana Fish, Wildlife & Parks (FWP) Region One is proposing forest management treatments throughout the Thompson Chain of Lakes (TCL) complex, which includes Logan State Park and encompasses over 3,000 acres (Figure 1).

The TCL complex provides public access to high quality waters for camping, boating, fishing, and other recreational opportunities. In addition, the complex is a popular area for swimming, hunting, ice fishing, wildlife viewing, hiking, birdwatching, picnicking, etc. The complex provides developed recreational facilities such as campsites, shower facilities, restrooms, parking areas and boat ramps and is comprised of large areas of undeveloped forest land. FWP's 2018 Forest Management Plan[1] provides direction and guidance to the Parks Division for managing forest land for public use and recreational values. Public safety, aesthetics, and visual screening are key priorities for forest management in developed areas. Beyond developed areas, the priority focus is insect and disease management, fire hazard mitigation, fish and wildlife habitat, and other recreation opportunities.

The areas proposed for treatment include the campsites and developed areas throughout the TCL complex (Figure 1). The treatments would primarily involve the removal of conifer trees (both of merchantable and nonmerchantable value). The treatments would also be aimed at helping to mitigate hazard trees in developed areas. Hazard trees are trees that are likely to fail and cause injury to either people or property on facilities (i.e. campgrounds, boat ramps, trailhead parking, administrative sites, kiosks, information centers, etc.) Additionally treatments would help reduce hazardous fuels in the wildland urban interface (WUI) and increase resiliency to insects and diseases. For a detailed description of the proposed action, please see the narrative summary below. If approved by the Parks and Recreation Board, the work could begin as early as November 2019.

2. Agency authority for the proposed action:

23-1-101 et. seq., Montana Code Annotated (MCA)
FWP is authorized by law to own and manage lands as State Parks. The lands subject to this proposal are included in the Logan and Thompson Chain of Lakes State Parks.

87-1-201(9)(a)(iv) and 87-1-621 MCA
FWP is required to implement programs that address fire mitigation, pine beetle infestation, and wildlife habitat enhancement giving priority to forested lands in excess of 50 contiguous acres in any state park, fishing access site, or wildlife management area under the department's jurisdiction. The Montana legislature has provided FWP the means to accrue revenue from forest management activities and spend that revenue to fund further management projects on its forested lands.

2018 FWP Forest Management Plan

[1] Available upon request from R1 FWP (Kalispell) or FWP Wildlife (Helena) office.

The FWP Forest Management Plan sets forth desired habitat conditions while providing direction and guidance on managing forest land. The plan aims to balance public use opportunities with a strong consideration for maintaining the ecological integrity of forests. It also provides a framework for developing desired future conditions (DFCs), identifies mechanical and non-mechanical treatments as management tools to achieve DFCs, and establishes guidelines for implementing forestry treatments on FWP forested lands.

23-1-126 MCA, The Good Neighbor Policy of Public Land Use
As applied to public recreational land, the Good Neighbor Policy seeks to limit impacts to adjoining private and public recreational land from noxious weeds, trespass, litter, noise and light pollution, streambank erosion, and loss of privacy.

3. Name of Project:
Thompson Chain of Lakes Forest Management Project

4. Anticipated Schedule:
Estimated Commencement Date:
Fall 2019

Estimated Completion Date:
Fall 2022 – project may have several phases based on funding and grant opportunities

Current Status of Project Design (% complete):
5%

5. Location affected by proposed action (county, range and township – included map):

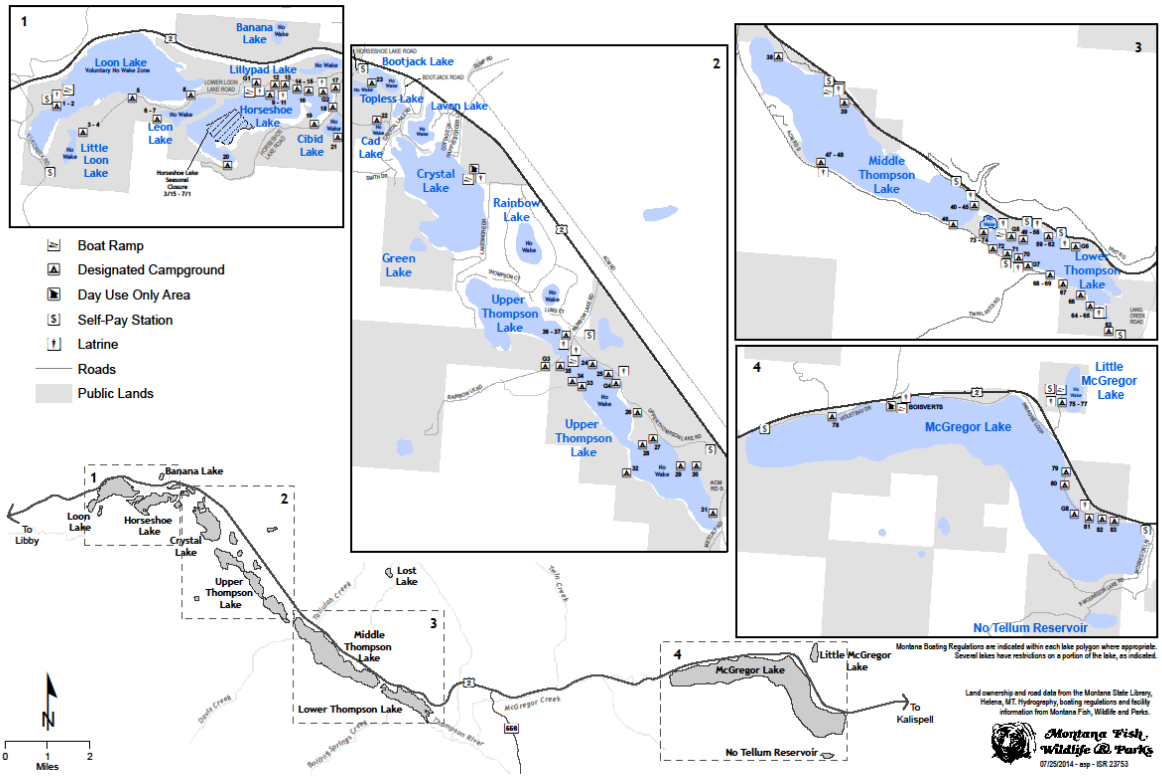
Flathead County-
McGregor and Little McGregor Lakes – 476 acres
T26N R25W sections 4, 5, and 9
T26N R26W section 1

Sanders County-
Lower Thompson Lake- 365 acres
T26N R27W sections 13 and 14

Lincoln County-
Lower Thompson Lake – included in Lower Thompson above
T26N R27W sections 11 and 12
Middle Thompson Lake – 136 acres
T26N R27W sections 3, 4 and 9
Upper Thompson Lake – 740 acres
T26N R27W section 5
T27N R27W sections 29, 31, 32 and 33

Horseshoe complex – 971 acres (includes Banana, Loon and Little Loon)
T27N R28W sections 23, 24, and 26
Loon and Little Loon Lakes
T27N R28W sections 22 and 27

Map of the Thompson Chain of Lakes complex



6. Project size -- estimate the number of acres that would be directly affected that are currently:

	Acres		Acres
(a) Developed:		(d) Floodplain	0
Residential	0		
Industrial	0	(e) Productive:	
(existing shop area)		Irrigated cropland	0
(b) Open Space/	462	Dry cropland	0
Woodlands/Recreation		Forestry	0
(c) Wetlands/Riparian	0	Rangeland	0
Areas		Other	0

8. Permits, Funding & Overlapping Jurisdiction.

(a) Permits: permits will be filed at least 2 weeks prior to project start.

Agency Name: Montana Department of Natural Resources & Permits: SMZ Conservation (DNRC) Alternative Practice

(b) Funding:

State of Montana – Montana Fish, Wildlife &Parks $14,000
Costs to FWP for these treatments would be funded by a combination of (a) the legislatively-established FWP Forest Management Account, (b) grant funding, and (c) Parks Division operations and maintenance funds. Pursuant to the provisions of 87-1-201(9)(a)(iv), any excess revenue resulting from the project would be deposited into an account to implement further forest management projects.

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name	Type of Responsibility
Montana State Historic Preservation Office	Cultural & Historic Resources
Lincoln County Weed District	Noxious weed control
Flathead County Weed District	Noxious weed control
Montana Dept. of Natural Resources and Conservation	Fire Protection

9. Narrative summary of the proposed action:

FWP is proposing to conduct forest management treatments on portions of the Logan and Thompson Chain of Lakes State Parks with the purpose of:

- Removing hazard trees that pose a threat to public safety and property
- Reducing the potential for hazard trees to develop by maintaining or enhancing individual tree and stand-level resilience as well as resistance to stressors and damaging agents (such as drought, insects and disease, wildfire)
- Reducing hazardous fuels in the wildland urban interface
- Improving and maintaining aesthetics (e.g. shade, noise and visual buffering, park-like setting) by promoting:
    - diversified stands with healthy and full crowns
    - large trees (relatively large bole diameter and height)
    - removal of undesirable and suppressed trees that are competing with desirable trees
- Selling any resulting merchantable tree byproducts to offset treatment costs and generate revenue for the FWP Forest Management Account

Forest management treatments are expected to benefit:

- Safety of the public in the short-term (through removal of immediate hazard trees) and in the long-term (by promoting healthy and vigorous trees and stand conditions that would be more resilient to stressors and damaging agents)
- Improvements (such as fences, signs, structures, toilet facilities, etc.) within developed areas
- Neighboring lands and structures that may be affected by hazardous fuels in the event of a wildfire
- Aesthetics of the parks
- A variety of wildlife species that depend on more open stand conditions (such as for foraging on understory grasses, forbs, and shrubs)
- State park operations and maintenance funding through reduced costs of mitigating hazard trees by addressing the underlying forest health issues that lead to the development of hazard trees (i.e. tree mortality) and potentially through revenue generated by forest products sales to treat additional state parks in the future.

Forest management treatments would include tree removal (both of trees with merchantable and nonmerchantable value) and tree planting. In silvicultural terms, these types of forest treatments would be categorized as sanitation and improvement cutting. Natural regeneration is expected to fill in some openings created by tree removal. Artificial regeneration (tree planting) may be implemented in some openings. Ponderosa pine and western larch regeneration would be favored due to their ability to resist root rot, better wind-firmness, and aesthetic value. Trees selected for removal would be based on several factors including:

- Hazardous trees that pose a threat to public safety, property, or improvements
- Trees affected by insects or diseases that have the potential to become hazards in the near future
    - Dead trees (called "snags") would be retained for wildlife, such as cavity nesting birds, where they do not pose a threat public safety, property, or improvement.
- Suppressed and intermediate trees that are competing with desirable dominant and codominant trees for resources (sunlight, nutrients, and water) which, in turn increases the potential for insect- and disease-induced mortality
- Trees that contribute to the potential for crown fires (such as ladder fuels which are tree canopies that form vertical layers that can allow surface fires to ascend into overstory tree crowns in the event of a wildfire)
- Additional trees to reduce competition stress and create a more vigorous and resilient stand condition overall.

Tree removal would be accomplished through a combination of mechanized methods. Merchantable trees would be treated with ground-based logging equipment, such as feller-bunchers and skidders, that would cut and skid trees to designated roadside locations (called "landings"). Tree stems would be delimbed and processed into logs. Logs would be loaded onto log trucks and hauled to local forest product manufacturing facilities. Nonmerchantable trees (trees too small to be manufactured into forest products) would be treated by mastication or felled with chainsaws. Slash (the nonmerchantable limbs and tree tops) and cull material generated from this process would be treated either by piling and burning, grinding or chipping, and/or removing the material from the site. Ground disturbance is expected on skid trails and at landing areas. Any ground disturbance (exposed, displaced, or compacted soils) would be rehabbed and seeded with a native grass seed mix. Contractors hired to do this work would be required to adhere to Montana Forestry Best Management Practices (BMPs).

FWP would develop a site-specific treatment plan for each site with contractors hired to do this work. This plan would identify resource protection measures to minimize impacts to the site. FWP would oversee the activities while they are on-going to ensure compliance with the plan and to minimize resource impacts.

Access to the project areas would be from existing roads. Roads would be upgraded to the extent necessary to facilitate logging and log hauling while meeting BMPs. Temporary "jump-up" roads (relatively short spur roads) may be needed in some areas. These would be located on flat ground and where excavation could be avoided. Ground impacts, such as more severe soil compaction or soil exposure, may be greater on these spur roads. These would be reclaimed and blocked to prevent unauthorized motorized use.

The operating period for the proposed treatments would be from November 1 through April 15, 2020 in order to minimize impacts to state park visitors. Ground based logging equipment would

be required to operate under relatively dry, frozen, or snow-covered conditions in order to minimize impacts to soil and vegetation. Other clean-up and rehab activities, such as slash treatment and grass seeding, could potentially occur throughout the year. If slash is piled and burned, burn piles would be located in openings away from residual trees and neighboring property lines. Burning would be conducted in accordance with open burning seasons and applicable state and county regulations.

Road work and logging activities would comply with Montana Forestry BMPs and the Montana Streamside Management Zone law. To minimize the spread of noxious weeds; all equipment would be cleaned and inspected by FWP before moving onto the FWP lands. Exposed bare mineral soils would be reseeded immediately and any weed infestations would be treated with herbicides indefinitely through the annual Parks Division noxious weed management efforts.

Area Description

The TCL complex has experienced several decades of timber harvest under former private ownership. The property was acquired by FWP in the early 1990's to perpetuate pre-existing recreational use and has since been managed by the Parks Division.

The TCL complex provides 128 designated campsites and seven dispersed boat launching areas. Most of the complex is available for year-round use, and visitation has averaged approximately 112,000 visits per year for the past three years. Many of the developed amenities are located on or near lake shores. These areas contain mature Douglas-fir trees that are stressed by root disease or root compaction from decades of recreational use occurring around the sites.

Since acquiring the property, FWP has conducted several forestry projects throughout the TCL complex including: a four-phase 320-acre project around Crystal Lake, Middle Thompson and Upper Thompson Lakes in 2005, a 10-acre fuel reduction project at McGregor Lake in 2007, and another 390-acre forest health project at McGregor Lake in 2010. In all, FWP has conducted some type of forest management action on nearly 25% of the total 3,000 total acres.

Current Conditions and Site-specific Stand Descriptions

The existing stands within the TCL complex proposed for treatment vary throughout the complex but can be characterized as being largely Douglas-fir with a dense understory. Root rot (Armillaria) single tree and clump infections are scattered throughout the complex. Douglas-fir bark beetle (DFBB) infestations occur in Douglas-fir throughout the complex. The beetle infestations are more noticeable near the recreation sites, where root compaction is a contributing factor in causing stress, which attracts DFBB to finish killing the individual trees. Recent periods of drought have also contributed to some of the observed mortality.

McGregor and Little McGregor Lake

McGregor Lake had a 10-acre fuel reduction in 2007 and then another more comprehensive fuel reduction project 2010, which treated another 390 acres. Treatment in this parcel would be prioritized around campsites and along the access road, focusing on the removal of Douglas-fir infected by root rot or infested by DFBB, or trees at high risk of becoming infected/infested in the next 5 years. Other species such as ponderosa pine and western larch may be removed if they are hazards to facilities.

Lower Thompson Lake
Lower Thompson Lake saw selective timber harvest about 50 years ago. Since then there are no documented forest management activities for this area of the complex except for removal of hazardous trees from year to year. Treatments in this parcel would be prioritized around campsites and along the access road, focusing on the removal of Douglas-fir infected by root rot or infested by DFBB, or trees at high risk of becoming infected/infested in the next 5 years. Other species such as ponderosa pine and western larch may be removed if they are hazards to facilities. Adjacent to and between campsites, sanitation and improvement thinning would be implemented in areas of low vigor and high-risk for mortality.

Middle Thompson Lake
Middle Thompson Lake is a mature stand of Douglas-fir, western larch and Engelmann spruce. The understory is composed of scattered dense clumps of Douglas-fir sapling stands. Twenty-four acres of this area had a precommercial thin treatment in 2009. Logan State Park is located in this section and has historically had hazard trees removed every year since the park was created. Treatments in this parcel would be prioritized around campsites and along the access road, focusing on the removal of Douglas-fir infected by root rot or infested by DFBB, or trees at high risk of becoming infected/infested in the next 5 years. Other species such as ponderosa pine and western larch may be removed if they are hazards to facilities. Adjacent to and between campsites, sanitation and improvement thinning would be implemented in areas of low vigor and high-risk for mortality. Portions of this parcel border private lands. Fuel hazards would be evaluated adjacent to residential property and hazardous fuels would be removed to reduce the risk of crown fire adjacent to structures.

Upper Thompson Lake
Upper Thompson Lake was pre-commercially thinned about 50 years ago, and then 213 acres were precommercially thinned in 2009. The overstory is generally a vigorous stand of Douglas-fir, western larch and ponderosa pine larger than 7 inches DBH. This stand is moderately- to densely- stocked and Douglas-fir "ladder" fuels have accumulated in the understory to the point that the whole stand is becoming susceptible to a crown fire. There are many single tree and clump infection sites of root rot throughout the stand. Treatments in this parcel would be prioritized around campsites and along the access road, focusing on the removal of Douglas-fir infected by root rot or infested by DFBB, or trees at high risk of becoming infected/infested in the next five years. Other species such as ponderosa pine and western larch may be removed if they present hazards to facilities. Adjacent to and between campsites, sanitation and improvement thinning would be implemented in areas of low vigor and high-risk for mortality. One portion of this parcel borders private lands. Fuel hazards would be evaluated adjacent to residential property and hazardous fuels would be removed to reduce the risk of crown fire adjacent to structures.

Horseshoe Lake complex
Thirty-three acres of the area were treated in 2009, mainly along the south side of the lake. Most of the area has remained untreated since FWP acquired the property. Treatments in this parcel would be prioritized around campsites and along the access road, focusing on the removal of Douglas-fir infected by root rot or infested by DFBB, or trees at high risk of becoming infected/infested in the next 5 years. Other species such as ponderosa pine and western larch may be removed if they are hazards to facilities. Adjacent to and between campsites, sanitation and improvement thinning would be implemented in areas of low vigor and high-risk for mortality. Portions of this parcel border private lands. Fuel hazards would be evaluated adjacent to

residential property and hazardous fuels would be removed to reduce the risk of crown fire adjacent to structures.

10. Description and analysis of reasonable alternatives:

Alternative A: No Action
FWP would not conduct the proposed forest management activities under this alternative. The TCL complex forests would remain untreated, creating increased opportunities for continued bark beetle infestations within Douglas-fir stands. Forest succession and competition amongst trees for limited resources (nutrients, sunlight, and water) would continue, leading to decreased stand vigor and potential for trees and stands to be less resilient to stressors and damaging agents. Maintenance costs may increase over time as more trees die and increasingly pose threats to public safety, property, and improvement. Dead and downed fuels may increase, and as new trees regenerate in gaps created from overstory mortality, ladder fuels may also increase leading to increased hazardous fuel build up. Dead and downed trees may negatively affect the aesthetics of the parks. Higher stand densities and increased dead and downed wood may increase habitat availability for species that depend on that condition while potentially negatively affecting species that depend on more open stand conditions. No timber would be sold to potentially generate revenue for the FWP Forest Management Account.

FWP would continue mitigating hazard trees and maintaining improvements in these state parks.

Alternative B:
Complete project to restore forest health by managing stands of Douglas-fir to ensure stand replacement consists of western larch and ponderosa pine. The TCL complex is experiencing several factors in the decline of the Douglas-fir stands caused by root disease, root compaction from decades of recreational use, drought periods, and finally bark beetle infestation. The combination of these factors, ultimately, ends up killing those infested trees. This project would help manage the current stands of Douglas-fir, by removing those trees that are deemed susceptible to bark beetle form their stressed conditions, and eventually replace the Douglas-fir stands with western larch and ponderosa pine species.

Following this action, FWP anticipates that hazard trees would be mitigated, tree vigor and resilience to insects and diseases would be improved, hazardous fuels in the wildland urban interface would be reduced, aesthetics would be improved, and the sale of timber may generate revenue for the FWP forest management account.

11. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

FWP would comply with Montana Forestry Best Management Practices (BMPs), the Streamside Management Zone (SMZ) law, and applicable state and county regulations regarding forestry practices. This project could be subject to a BMP field review conducted every two years by DNRC.

PART II. ENVIRONMENTAL REVIEW CHECKLIST

1. Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.

A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?			X		Yes	1.b
c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				
f. Other (list)		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (attach additional pages of narrative if needed):

1.b. Existing roads would need to be improved to facilitate removal of timber and timber byproduct. These roads would be brought up to BMP specifications and all road work would comply with current BMP standards and applicable laws to minimize impacts to riparian areas and prevent sediment delivery to (or siltation of) perennial water bodies. Winter logging when the ground is frozen and/or snow covered would be implemented to reduce impacts to vegetation.

2. **AIR** Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Emission of air pollutants or deterioration of ambient air quality? (also see 13 (c))			X		Yes	2.a
b. Creation of objectionable odors?			X		Yes	2.b
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. For P-R/D-J projects, will the project result in any discharge which will conflict with federal or state air quality regs? (Also see 2a)		X				
f. Other		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (attach additional pages of narrative if needed):

2.a,b. Slash and residual byproduct generated during the course of the proposed treatments may be burned on-site. Burning of slash would comply with Flathead and Lincoln County open burning timing restrictions and comply with inter-agency slash treatment regulations.

3. **WATER** Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?		X				
b. Changes in drainage patterns or the rate and amount of surface runoff?			X		Yes	3.b
c. Alteration of the course or magnitude of flood water or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?			X		Yes	3.d
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?		X				
I. Effects on any existing water right or reservation?		X				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				
l. For P-R/D-J, will the project affect a designated floodplain? (Also see 3c)		X				
m. For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a)		X				
n. Other:						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (attach additional pages of narrative if needed):

3.b,d. Treating the subject stands may slightly alter the rate and volume of spring runoff and retained snowpack. Given the limited scale of the project and condition of adjacent stands, this effect is expected to be minor.

4. VEGETATION Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?			X		Yes	4.a
b. Alteration of a plant community?			X		Yes	4.b
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?			X		Yes	4.e
f. For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		X				
g. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Vegetation (attach additional pages of narrative if needed):

4.a,b,e. Part of the project intent is to improve forest vigor and reduce the susceptibility of the treated stands to insects, diseases, and crown fire. The proposed action would thin forest stands, reducing competition stress of the residual vegetation within the treatment units. The thinning would support growth of shrubs and other deciduous vegetation by opening the canopy and allowing more sunlight to get to the forest floor. Please see #8 above for a more detailed description of proposed treatments. Noxious weed spread would be mitigated by requiring equipment to be washed before entering the TCL complex, minimizing ground disturbance, immediately reseeding disturbed areas, and treating affected areas or areas at risk with herbicide for at least 3 years following the treatment.

5. FISH / WILDLIFE Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?			X		Yes	5.b
c. Changes in the diversity or abundance of nongame species?			X		Yes	5.c
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?			X		Yes	5.g
h. For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f)		X				
I. For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d)		X				
j. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Fish and Wildlife:

5.b,c,g – Part of the intent of the proposed treatment is to restore forest health and reduce the susceptibility of the treated stands to insects, diseases, and crown fire. The proposed action would thin overstory, particularly in areas of white-tailed deer winter range. Typical winter range for white-tailed deer consists of lower elevation areas (~3000') that include quality browse, canopy cover of ≥70% and lower snow depths and/or areas of snow shedding. Although thinning would reduce canopy closure in the short-term, it will also increase vigor of understory shrubs and other deciduous vegetation, which would add to the quality of white-tailed deer winter range in the long-term. In addition, the proposed units are small and narrow, allowing ease of deer movement to nearby and/or surrounding forest lands during treatment activities. Invasive weeds, which can reduce densities of native plants, are also a concern - particularly on areas of big game winter range. However, all equipment used in this proposed treatment will be cleaned and weeds will be treated indefinitely through annual Parks weed management efforts. Although increased road densities can increase illegal human activities relative to game and nongame species, temporary "jump up roads" will be reclaimed to prevent future use, post-treatment**.**

Forest management activities will benefit some nongame species and negatively impact others. Overall, the relatively short duration of each individual project and the timing of the work will have minimal impacts on nongame species. Cavity nesting bird and mammal species and those that forage on dead or dying trees may be negatively impacted through the removal of snags and downed timber that are determined to be hazardous. Therefore, snags will be left intact to minimize this impact. Additionally, early spring timber harvest may displace some bird species that establish nesting territories during that time (late-February - March; northern flickers, great horned owls, etc.). However this time frame will be avoided and , these species are not expected to be permanently displaced from the s. Opening of the tree canopy is expected to promote the growth of grasses, forbs, and understory shrubs that will benefit a wide

variety of bird and small mammal species especially songbirds that rely on multi-story stands of deciduous vegetation for nesting and foraging. The FWP forester and the nongame biologist will coordinate to avoid forestry work around sensitive species and during sensitive times (e.g., nesting bald eagles and great blue herons).

The Thompson Chain of Lakes also has several breeding pairs of common loons within the proposed project. While loons are sensitive to human disturbance following best management practices (BMPs) outlined in the Conservation Plan for Common Loons in Montana-Appendix B (Hammond 2012) will limit breeding pairs exposure to any disturbances expected from the project. Specific locations within the project area BMPs should be followed include Leon Lake and the channel between Upper Thompson Lake's middle and eastern lobes.

Hammond, C. A. H. 2009. Conservation Plan for the Common Loon in Montana. Montana Department of Fish, Wildlife and Parks, Kalispell, MT.

Tonya Chilton-Radandt – FWP Wildlife Biologist in Libby.

B. HUMAN ENVIRONMENT

6. NOISE & ELECTRICAL EFFECTS Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Increases in existing noise levels?			X		No	6.a
b. Exposure of people to severe or nuisance noise levels?			X		No	6.b
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Noise/Electrical Effects (attach additional pages of narrative if needed):

6.a,b. Logging and trucking equipment would increase noise levels on the project area while activities are ongoing, but these activities would occur outside of high-use seasons for the TCL complex (e.g., during the late-fall through early-spring season). Merchantable timber byproducts would be transported out of the complex via existing roads within the sites and county roads.

7. LAND USE Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Use (attach additional pages of narrative if needed):

8. RISK / HEALTH HAZARDS Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?			X			8.a
b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?			X			8.c
d. For P-R/D-J, will any chemical toxicants be used? (Also see 8a)		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Risk/Health Hazards (attach additional pages of narrative if needed):

8.a,c. Timber management activities are inherently dangerous. All contractors would be required to comply with federal and state safety standards for logging operations as established by the United States Department of Labor, Occupational Safety and Health Administration (OSHA; 29 Code of Federal Regulations 1910 and any other such applicable regulations promulgated by OSHA) and as required by Title 50, Chapter 71 of the Montana Code Annotated, and any regulations promulgated to implement the statutes found in that Title and Chapter of the Montana Code Annotated.

9. COMMUNITY IMPACT Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?			X		N/A	9.c.
d. Changes in industrial or commercial activity?			X		N/A	9.d.
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?			X		Yes	9.e
f. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Community Impact (attach additional pages of narrative if needed):

9.c,d,e. Jobs would be created or sustained by project work while the project is ongoing. Log hauling and contractor traffic would increase during the project. Roads and other infrastructure that would be used by contractors were designed (and would be maintained) to support commercial logging and log transport activities. Signage would be placed near the entrances of the TCL complex and where log trucks would

enter public roads to alert traffic of log truck activity. According to the Montana Bureau of Business and Economic Research, the harvest of a million board-feet of timber equates to roughly 10 jobs annually.

10. PUBLIC SERVICES/TAXES/UTILITIES Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				
b. Will the proposed action have an effect upon the local or state tax base and revenues?			X		N/A	10.b
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Will the proposed action result in increased used of any energy source?			X		N/A	10.d
e. Define projected revenue sources			X		N/A	10.e
f. Define projected maintenance costs.			X		N/A	10.f
g. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Public Services/Taxes/Utilities (attach additional pages of narrative if needed):

10.b,d. The Project would be expected to increase state and local tax revenues from the sale of fuel, supplies and/or equipment and from contractor employees' income. Fuel and electricity would be required to treat stands and process the timber byproduct.

10.e. Depending on the market conditions of logging and hauling costs, and delivered log prices for the timber byproduct removed, the project might generate revenue for FWP's Forest Management Account (authorized by § 87-1-621, MCA) to be used for future forest management projects.

10.f. Post-treatment maintenance costs may be incurred for slash disposal and noxious weed treatments. FWP would provide funding for maintenance costs from its Forest Management Account or from Parks operation and maintenance funds. The mitigation of hazard trees may reduce the maintenance burden.

11. AESTHETICS / RECREATION Will the proposed action result in:	IMPACT Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?			X		N/A	11.a.
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report)		X				
d. For P-R/D-J, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c)		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Aesthetics/Recreation (attach additional pages of narrative if needed):

11.a. Most treated stands would be visible from roads and developed sites within the TCL complex and, in the short term (< 3 years), aesthetics may be negatively affected until the slash and debris has been cleaned up and disturbed ground has been rehabbed. In the long term (> 5 years), aesthetics would be improved. FWP anticipates that the crown fire risk and potential for bark beetle infestation, which would also modify the scenic vista, would be reduced.

12. CULTURAL / HISTORICAL RESOURCES Will the proposed action result in:	IMPACT Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?		X				
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a)						12.d
e. Other:						12.e

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources (attach additional pages of narrative if needed):

12.d,e. In accordance with the Montana Antiquities Act (22-3-421 to 22-3-442) and with FWPs ARM rules (12.8.501 to 12.8.10), a heritage resource survey was conducted by Western Cultural, Inc. of proposed timber thinning areas. The survey failed to relocate three previously recorded sites in the project area. **24LN1538, 24LN1539,** and **24LN1542** were recorded in 1994 in

advance of construction activity on US Highway 2. The three sites are all small historic trash scatters. The resources may be obscured by forest duff or vegetation, they may have been removed or obscured by the widening of the highway, they may have been located in error during the original recording, or the site may have been subjected to illegal collecting activity. This investigation did not locate any other cultural resources. It is recommended that the hazard tree removal proceed as currently planned. The proposed project will be dependent upon final State Historic Preservation Office (SHPO) concurrence.

If previously undetected archaeological sites are uncovered during timber harvesting, in accordance with MCA 22-3-435, the State Historic Preservation Office will be contacted and steps will be taken to ensure the preservation of the archaeological site until it can be evaluated by a professional archaeologist.

SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE Will the proposed action, considered as a whole:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total.)			X		Yes	13.a
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?		X				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		X				
f. For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e)		X				
g. For P-R/D-J, list any federal or state permits required.		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Significance Criteria (attach additional pages of narrative if needed):

13.a. This project would mitigate hazardous trees, improve tree vigor and reduce susceptibility of stand to insects and diseases, reduce crown fire potential within the proposed treatment units, improve aesthetics, and potentially generate revenue for the FWP Forest Management Account. Work proposed in this EA may complement similar forestry work on adjacent lands. This said, FWP does not anticipate any cumulative negative impacts to result if this project were completed.

PART III. NARRATIVE EVALUATION AND COMMENT

Montana Fish, Wildlife & Parks (FWP) proposes to implement forest management activities at the Thompson Chain of Lakes complex in FWP Region 1. If approved by the Montana State Parks and Recreation Board, the work would begin as early as November 2019. The purpose of the project is to address hazard trees that pose a threat to public safety, property, and improvements; improve resilience and resistance to stressors and damaging agents; reduce hazardous fuels in the wildland-urban interface; improve aesthetics; and potentially generate income for the FWP Forest Management Account.

FWP would select which trees for removal based on the criteria described in #8 (Narrative Summary) above. Site-specific operating plans would be developed for each site to be treated and FWP would oversee operations while they are on-going. Slash disposal and rehabilitation would be required as part of the contract and FWP would implement integrated noxious weed management to prevent noxious weed establishment and spread. Operations would be conducted in the late-fall through early-spring to minimize impact to users. Ground disturbing activities would be limited to periods of relatively dry, frozen, or snow-covered conditions. Contractors would be required to adhere to Montana Forestry BMPs. The cost of the project is expected to be partially offset by the sale of timber byproducts and, depending on market conditions and logging costs, the projects may generate income for the FWP Forest Management Account .

PART IV. PUBLIC PARTICIPATION

1. Public involvement:

The public will be notified in the following manner to comment on this current EA, the proposed action and alternatives:

- Two public notices in each of these papers: Western News, Kalispell Daily Interlake, Helena Independent Record.
- One statewide press release.
- Public notice on the Fish, Wildlife & Parks web page: *http://fwp.mt.gov*. and the Montana State Parks web page: http://stateparks.mt.gov/

Copies of this EA will be distributed to neighboring landowners and interested parties to ensure they are aware of the proposed project.

This level of public notice and participation is appropriate for a project of this scope having limited impacts, many of which can be mitigated.

2. Duration of comment period:

The public comment period will extend for (30) thirty days following the publication of the second legal notice in area newspapers. Written comments will be accepted until 5:00 p.m., November 9, 2019 and can be mailed to the address below:

Montana Fish, Wildlife & Parks Region One
Attn: Thompson Chain of Lakes Forest Management Project – Parks Division
490 N. Meridian Rd. Kalispell, MT 59901
OR
Written comments may be emailed to:
dbennetts@mt.gov

PART V. EA PREPARATION

1. **Based on the significance criteria evaluated in this EA, is an EIS required? (YES/NO)? If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.** NO - Based upon the above assessment which has identified a limited number of minor impacts to the physical and human environment that would be either for a short duration or can be mitigated below the level of significance, an EIS in not required and an environmental assessment is the appropriate level of review.
2. **Person(s) responsible for preparing the EA:**

Dave Bennetts
Park Manager, Montana Fish Wildlife and Parks Region 1
490 N Meridian Rd, Kalispell, MT 59901
406-751-4590

Contributors

Tonya Chilton-Radandt
Libby Wildlife Biologist, Montana Fish Wildlife and Parks Region 1
Libby, MT 59923
406-293-4161 ext 209

Brian Stephens
Libby Fisheries Biologists, Montana Fish, Wildlife and Parks Region 1
Libby, MT 59923
406-293-4161 ext 204

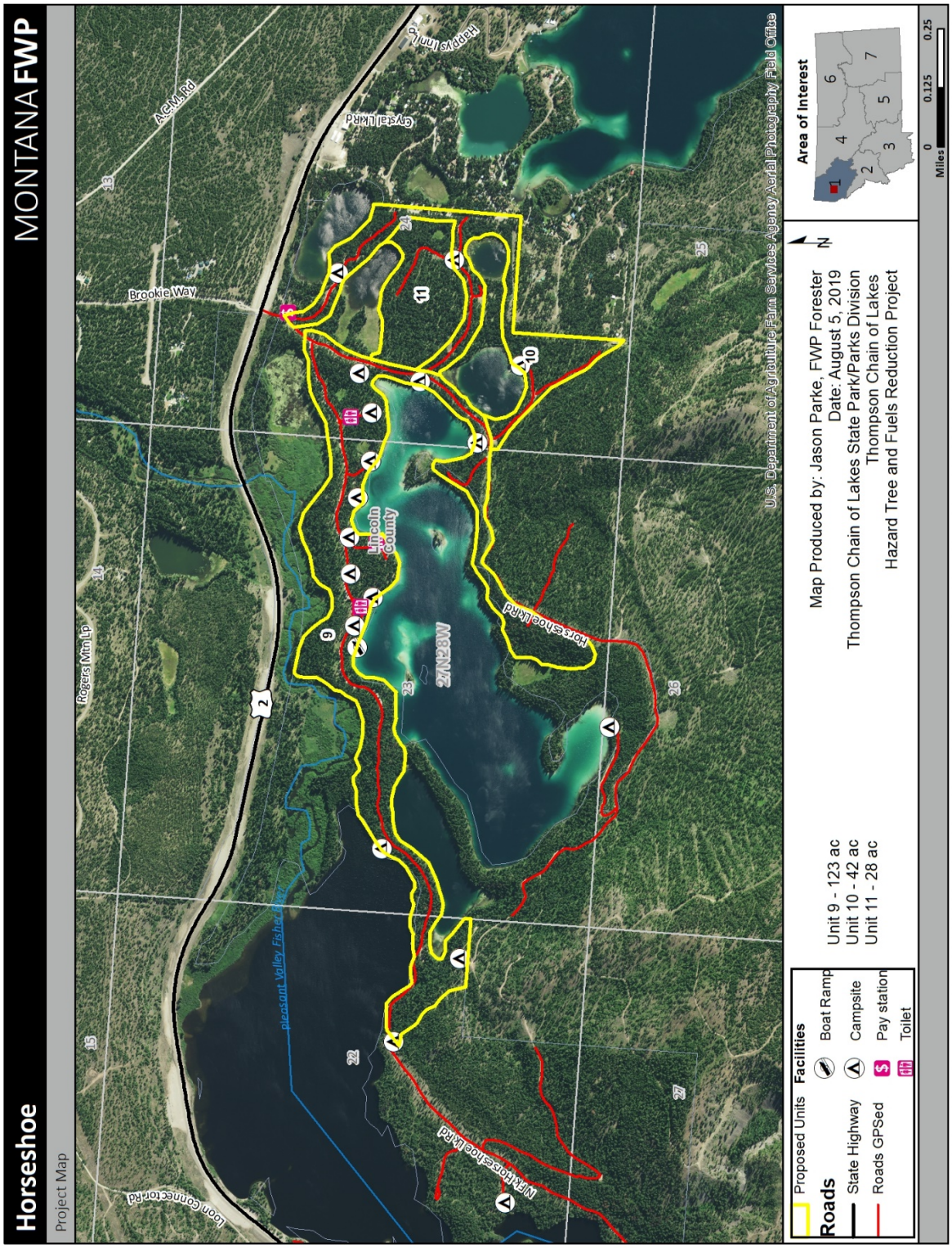
Chris Hammond
Non-Game Wildlife Biologist, Montana Fish, Wildlife and Parks
Kalispell, MT. 406-751-4585

Jason Parke
Forester, Montana Fish, Wildlife & Parks
Helena MT
(406) 444-3729

2. **List of agencies or offices consulted during preparation of the EA:**

Western Cultural, Inc.
Building 30, Suite 3
Fort Missoula Road
Missoula, MT 59804

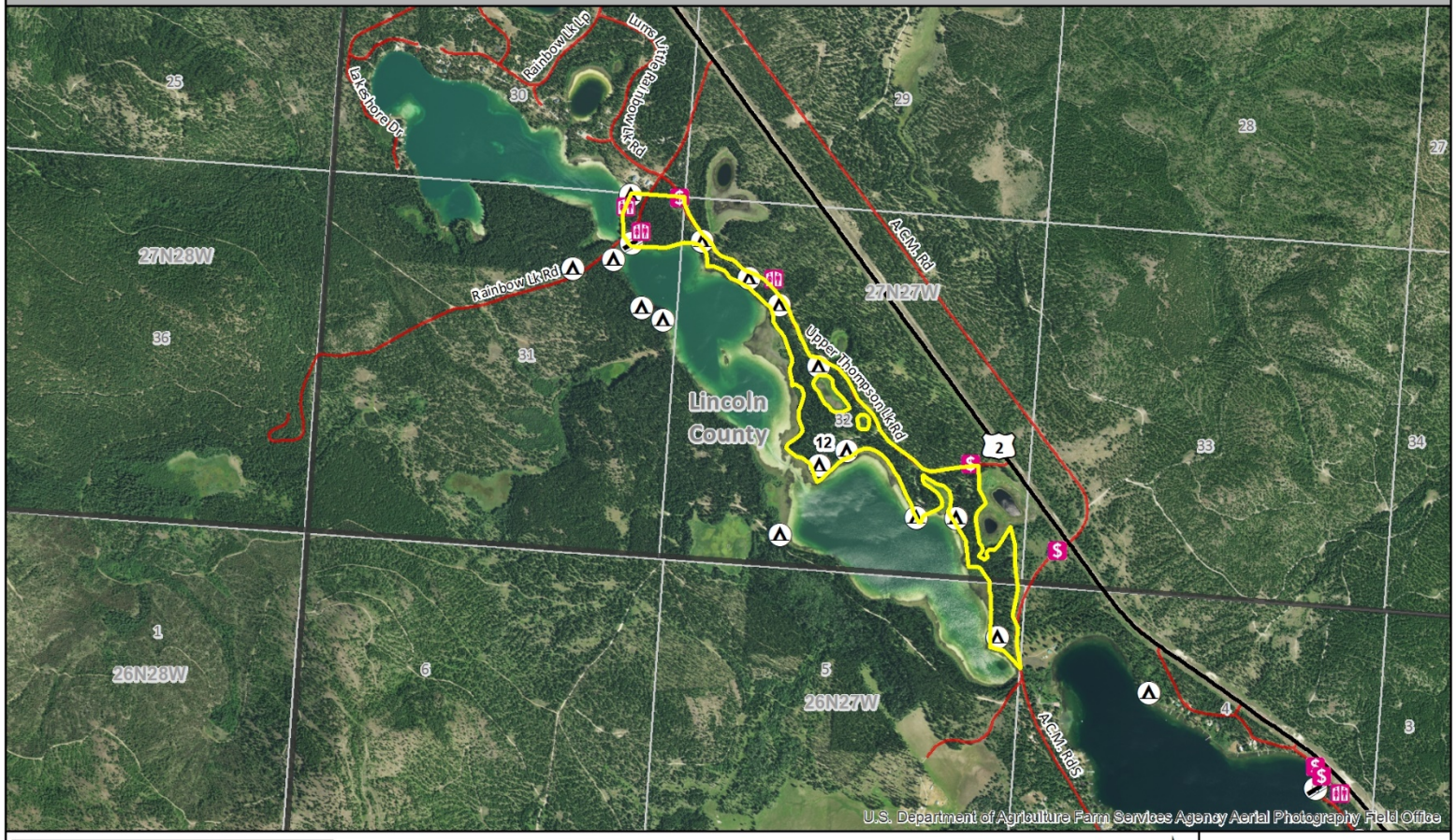
APENDIX A. PROPOSED TCL COMPLEX TREATMENT UNITS



Upper Thompson

MONTANA FWP

Project Map



Proposed Units

Proposed Units

Roads

State Highway

Major Roads

Facilities

Boat Ramp

Campsite

Pay station

Toilet

Unit 12 - 95 acres

Map Produced by: Jason Parke, FWP Forester
Date: August 28, 2019
Thompson Chain of Lake State Park/Parks Division
Thompson Chain of Lakes
Hazard Tree and Fuels Reduction Project

N

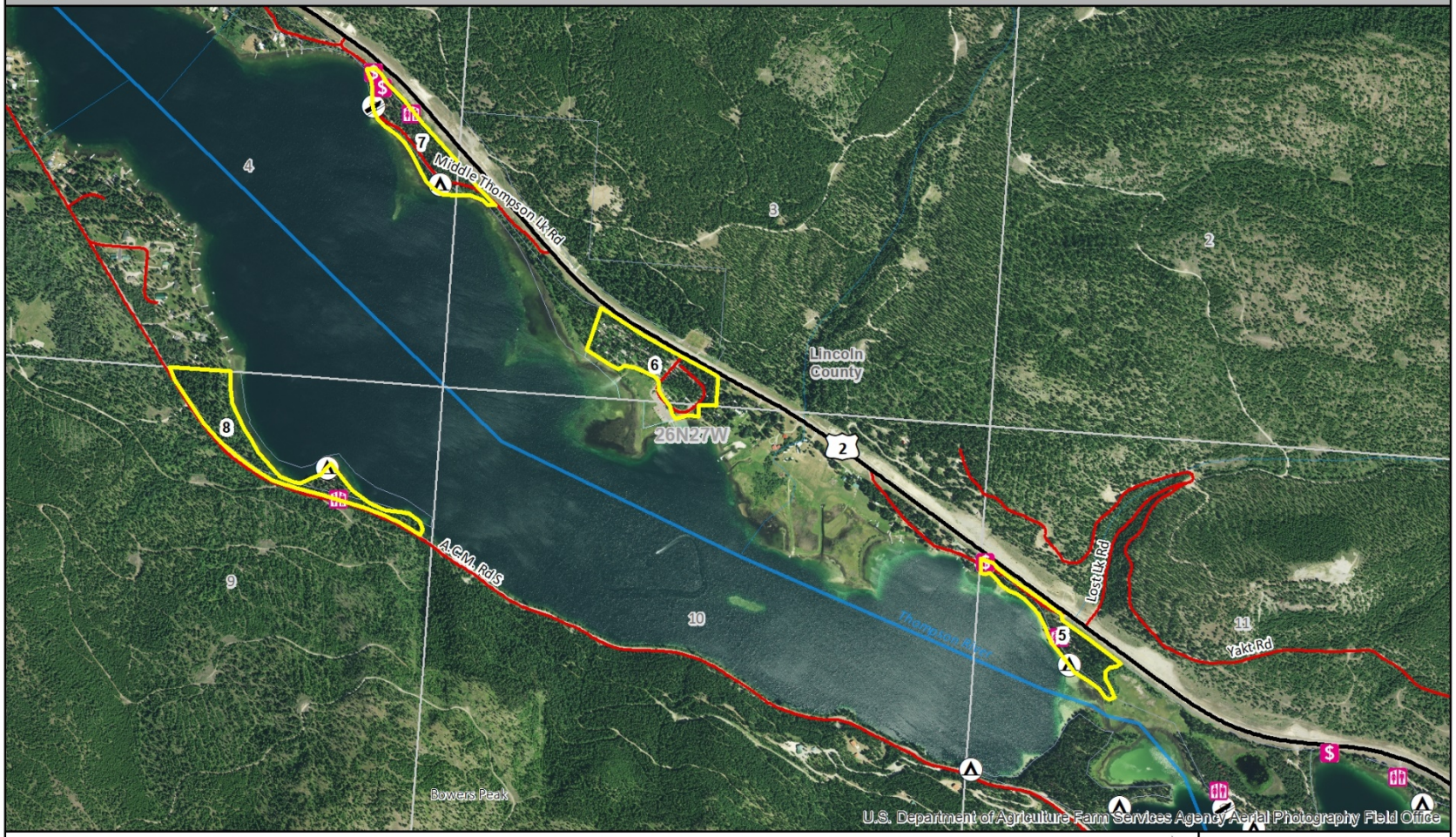
Area of Interest

0 0.175 0.35
Miles

Middle Thompson/Logan

MONTANA FWP

Project Map



Proposed Units

Roads

State Highway

Major Roads

Facilities

Boat Ramp

Campsite

Pay station

Toilet

Unit 5 - 7 ac
Unit 6 - 12 ac
Unit 7 - 10 ac
Unit 8 - 12 ac

Map Produced by: Jason Parke, FWP Forester
Date: August 5, 2019
Thompson Chain of Lakes State Park/Parks Division
Thompson Chain of Lakes
Hazard Tree and Fuels Reduction Project

N

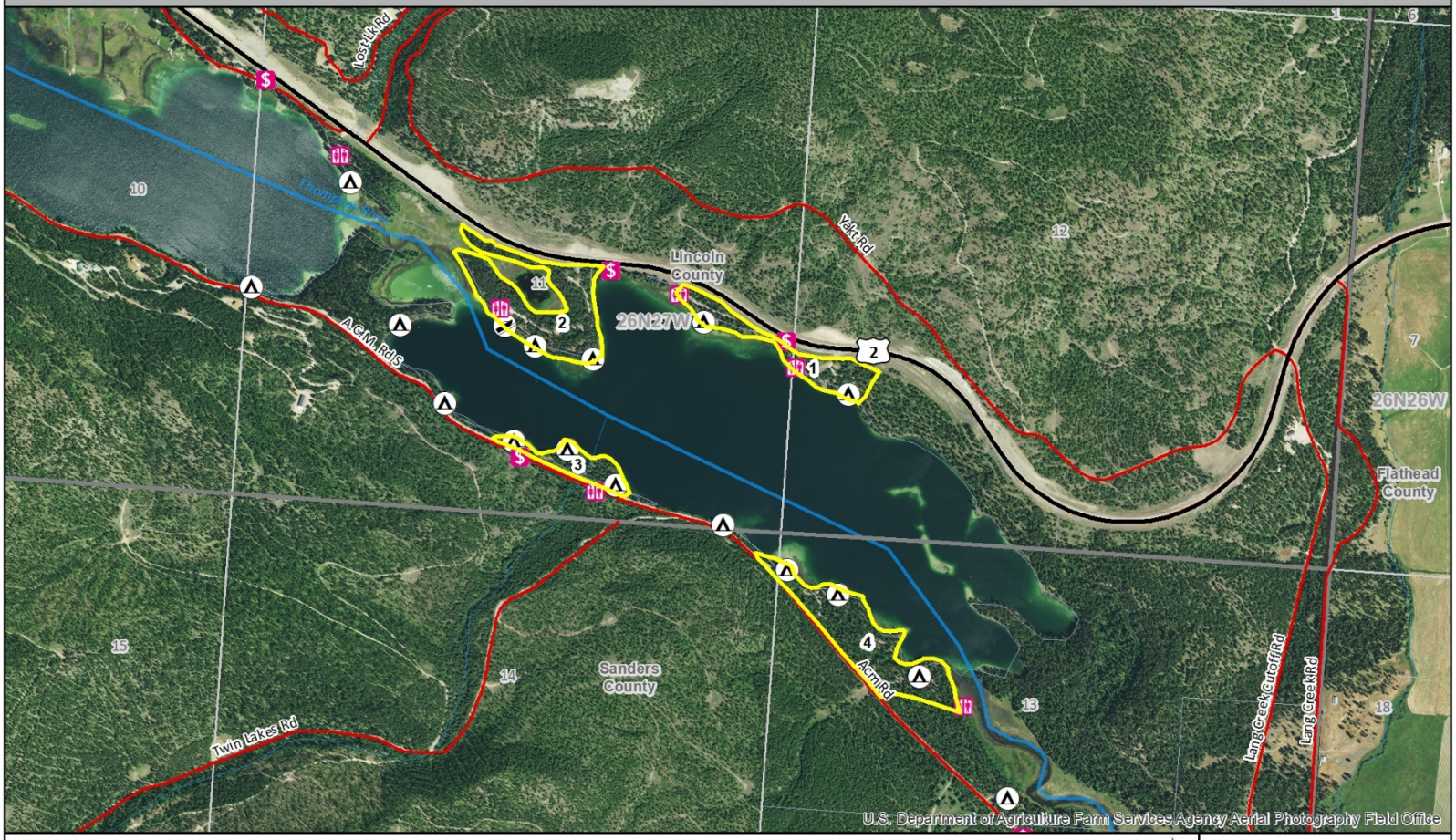
Area of Interest

0 0.125 0.25
Miles

Lower Thompson

MONTANA FWP

Project Map



Proposed Units

Roads
- State Highway
- Major Roads

Facilities
- Boat Ramp
- Campsite
- Pay station
- Toilet

Unit 1 - 10 ac
Unit 2 - 19 ac
Unit 3 - 5 ac
Unit 4 - 18 ac

Map Produced by: Jason Parke, FWP Forester
Date: August 5, 2019
Thompson Chain of Lakes State Park/Parks Division
Thompson Chain of Lakes
Hazard Tree and Fuels Reduction Project

N

Area of Interest

0 0.125 0.25
Miles

McGregor/Little McGregor

MONTANA FWP

Project Map

Proposed Units

Roads
- State Highway
- Major Roads

Facilities
- Boat Ramp
- Campsite
- Day-use
- Pay station
- Toilet

Unit 13 - 35 ac
Unit 14 - 4 ac
Unit 15 - 7 ac
Unit 16 - 35 ac

Map Produced by: Jason Parke, FWP Forester
Date: August 28, 2019
Thompson Chain of Lake State Park/Parks Division
Thompson Chain of Lakes
Hazard Tree and Fuels Reduction Project

N

Area of Interest

0 0.175 0.35
Miles

APENDIX B. STATE HISTORIC PRESERVATION OFFICE CONCURENCE

MONTANA STATE PARKS
stateparks.mt.gov

Travelers' Rest State Park
PO Box 995
Lolo, MT 59847
August 19, 2019

RECEIVED
AUG 21 2019
BY: SHPO

Pete Brown
Montana State Historic Preservation Office
PO Box 201202
Helena, MT 59620-1202

RE: Thompson Chain of Lakes State Park Survey Report

Dear Pete:

In accordance with the Montana Antiquities Act (22-3-421 to 22-3-442) and with FWPs ARM rules (12.8.501 to 12.8.10), a heritage resource survey was conducted by Western Cultural, Inc. of proposed timber thinning areas at Thompson Chain of Lakes State Park. One previously located site (24LN1541), a small lithic scatter, was recorded in 1994. The site could not be relocated during the 2019 survey and the consultant recommended that the hazard tree removal project proceed as planned as no impacts to heritage resources are anticipated.

A PDF of the report and shape files are included on the enclosed CD. We welcome your comments and questions about this project. Please let us know if you concur with our findings and send comments to the address listed above for me at Travelers' Rest State Park. Thank you, Pete!

Sincerely,

Sara Scott

Sara Scott, Ph.D.
Montana State Parks/Heritage Resources Program

CONCUR
MONTANA SHPO
DATE 8/26/19 SIGNED

TOURISM REPORT

MONTANA ENVIRONMENTAL POLICY ACT (MEPA) & MCA 23-1-110

The Montana Department of Fish, Wildlife and Parks has initiated the review process as mandated by MCA 23-1-110 and the Montana Environmental Policy Act in its consideration of the project described below. As part of the review process, input and comments are being solicited. Please complete the project name and project description portions and submit this form to:

Jan Stoddard, Bureau Chief, Industry Services and Outreach
MT Office of Tourism and Business Development-Department of Commerce
301 S. Park Ave.
Helena, MT 59601

Project Name: 2019 Thompson Chain of Lakes Forest Management Project

Project Description: Montana Fish, Wildlife and Parks Region One proposes to conduct forest management treatments to the Thompson Chain of Lakes recreation area (TCL) including Logan State Park.

1. Would this site development project have an impact on the tourism economy?
   NO YES If YES, briefly describe:.

   Yes, as described, the project has the potential to positively impact the tourism and
   recreation economy in the long run. The project includes forestry improvements near campsites and facilities to mitigate diseased and damaged trees, reduce fuels and reduce hazard to visitors. The forestry work will be performed during fall and winter months to minimize impact during the peak camping and water-based recreation season.

   TCL (including Logan State Park) consists of over 3,000 acres and 18 Lakes stretching 15 miles along US Highway 2 West between Libby and Kalispell. In addition to water-based recreation and amenities , TCL offers extensive camping opportunities with 128 designated campsites throughout the complex. Much of TCL is former private timber land that has seen extensive timber management and harvest in the past several decades.

   FWP estimated that the TCL complex received 121,937 visits in 2018.

2. Does this impending improvement alter the quality or quantity of recreation/tourism opportunities and settings?

NO YES If YES, briefly describe:
We are assuming the agency has determined it has necessary funding for the on-going
operations and maintenance once this project is complete. Removal of the trees in
and around the campsites and facilities based on tree health hazardous situations such
tree leaning over campsites positively impacts the safety of visitor use areas and
improves the quality of the experience.

Signature *Jan Stoddard* Date: 8/22/19

2/93
7/98sed